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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/718,500	11/24/2000	Ron Dembo	11483-80	2505

1059 7590 10/08/2003

BERESKIN AND PARR  
SCOTIA PLAZA  
40 KING STREET WEST-SUITE 4000 BOX 401  
TORONTO, ON M5H 3Y2  
CANADA

EXAMINER

AKERS, GEOFFREY R

ART UNIT	PAPER NUMBER
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3624

DATE MAILED: 10/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/718500

Applicant(s)

Rembo

Examiner

Hart, J

Art Unit

3644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 8/1/03
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 32-85 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 32-45 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 6) ☐ Other: \_\_\_\_\_

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## **DETAILED ACTION**

### ***Response to Amendment***

1. This action is issued in response to applicant's Amendment A(Paper #7) filed 8/1/03.
2. All original claims 1-31 were cancelled. New claims 32-45 were entered.
3. New claims 32-45 are pending.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. New claims 32-45 are rejected under 35 USC 103(a) as unpatentable over Young(US Pat. No: 6,393,409) in view of Baker(US Pat. No:6,336,103) and further in view of Rebane(US Pat. No: 6,078,904).
6. As per new claims 32-45, Young teaches a method for optimizing portfolios for multiple participants(Abstract)(Figs 1-4)(col 2 line 41-col 3 line 25) as well as utilizing a public network(Fig 1/130) and a benchmark pricing module(Fig 1/160) and an optimization engine(Fig 1/190) and running an optimization(Fig 2/230) until a final one(Fig 3/320) is obtained and an execution is performed(Fig 3/330). Young teaches the optimization method(Fig 4). Baker teaches a method for correlation of asset return to future financial liabilities(Abstract)(Figs 1-6)(col 1 line

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5-col 3 line 21) including securities to be employed, target returns, portfolio weights(Fig 1A/21) as well as calculating the covariance and averages(Fig 1A/22) and calculating a spanning covariance array(Fig 1A/24) to obtain an average return for each security(Fig 1A/25) and utilizing security weights(Fig 1A/26) and solving for optimum if the problem with a quadratic programming solution(Fig 1A/28) and calculating the covariance of the portfolio including portfolio returns in simulation period(Fig 1A/29) and developing sorted buys and sells and sector weights(Fig 1A/30). Baker further teaches generating a return for the weighted portfolio of assets(Fig 1B/37) and iterates on the improvement in covariance by selected allowable changes in asset weights until convergence is attained.(Fig 1B/40). Rebane teaches risk direct asset allocation for optimal allocation in a portfolio producing an optimal portfolio(Abstract)(Figs 1-12)(col 4 line 36-col 5 line 50) as well as reference to the efficient frontier(Fig 1) and investor risk tolerance functions(Fig 2) as well as a mapping of an investment portfolio's probability density function onto a preference axis(Fig 3). Rebane further teaches a graphical output from the main user interface of the software(Fig 7). It would have been obvious to one skilled in the art at the time of the invention to combine Young in view of Baker and further in view of Rebane to teach applicant's essential disclosure. The motivation to combine Young in view of Baker is to teach a method of analyzing a large number of potential assets to develop the optimum portfolio of assets to track a financial index as enunciated by Baker(col 3 lines 1-4). Furthermore the motivation to combine Young in view of Baker and further in view of Rebane is to teach a method for determining for an investor the investor's risk tolerance function and selecting a

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monetary allocation of investment assets according to both the risk tolerance function and quantifiable risk dispersion characteristics of a given allocation of investment assets in the portfolio as enunciated by Rebane(col 4 lines 37-46).

***Claim Rejections - 35 USC § 112***

7. New claims 32-45 are rejected under 35 U.S.C. 112, second paragraph, as failing to set forth in specifically stated presentation the subject matter which applicants regard as the invention. In particular, applicant should incorporate the discussion of the method of selecting the optimal portfolio from the efficient frontier that maximizes the utility function, the method of calculating the call and put values and what functions they are of the subsets selected and the method of solving the linear program to determine the efficient portfolio.

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***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR

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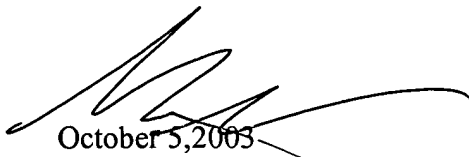
1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

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9. Questions concerning this communication should be addressed to the primary examiner of record, Dr. Geoffrey Akers, P.E., who can be reached between 6:30 AM and 5:00 PM Monday through Friday at 703-306-5844. If attempts to contact the primary examiner are unsuccessful, the primary examiner's superior, Mr. Vincent Millin, SPE, may be telephoned at (703)-308-1065.

The fax number for Formal or Official faxes and Draft or Informal faxes to Technology Center 3600 or this Art Unit is (703)-308-3687. Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703)-308-1113.

GRA



October 5, 2003

**DR. GEOFFREY R. AKERS, P.E.**  
**PRIMARY EXAMINER**